

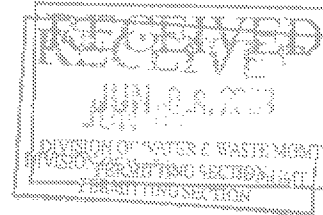


west virginia department of environmental protection

Division of Water and Waste Management
601 57th Street, SE
Charleston, WV 25304
Telephone: (304) 926-0495
Fax: (304) 926-0456

Joe Manchin III, Governor
Randy C. Huffman, Cabinet Secretary
www.wvdep.org

June 5, 2009



Jerome E. Cibrik, P.G.
Union Carbide Corporation
A Subsidiary of the Dow Chemical Company
P.O. Box 8361
3200/3300 Kanawha Turnpike
South Charleston, WV 25303

Dear Mr. Cibrik,

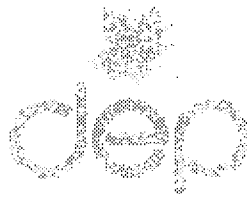
Enclosed is the Final Permit Number WVD000739722 for Union Carbide Corporation Private Trucking Operation. Note that the permit has been modified to reflect the editorial changes we discussed during our meeting on May 8, 2009. Should you have any additional questions on this permit, please contact Mr. Mark Priddy at 304 926 0499, Extension 1287.

Sincerely,

Sudhir Patel
Waste Program Manager
Division of Water and Waste Management

SP/mp

CC: Mark S. Priddy, Geologist, Permit Writer, RCRA
Chris Gatens, Environmental Enforcement Inspector Supervisor



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FACT SHEET
For
UNION CARBIDE CORPORATION PRIVATE TRUCKING OPERATIONS (PTO)
CLOSED RCRA SURFACE IMPOUNDMENTS – SWMU 9
EPA ID NUMBER: WVD 000 739 722
HAZARDOUS WASTE MANAGEMENT PERMIT

I. OVERVIEW

This Fact Sheet accompanies the draft permit for Union Carbide Corporation Private Trucking Operations (PTO) Facility, hereinafter called “the Permittee”, EPA I.D. Number WVD 000 739 722 and as prepared in accordance with Section 11.10 of 33 CSR 20, the Hazardous Waste Management Rule (HWMR).

The West Virginia Department of Environmental Protection (WVDEP), Division of Water and Waste Management (DWWM), intends to issue a Hazardous Waste Management Permit to the Permittee.

II. AUTHORITY

- a. This permit has been prepared in accordance with the authority invested in the state of West Virginia by the United States Environmental Protection Agency (EPA), under Section 3006 (b) of the Resource Conservation and Recovery Act (RCRA) of 1976, to administer and enforce a Hazardous Waste Management Program including: hazardous waste management draft permit preparation, issuance of final permit, administration, and enforcement of the permit's conditions and requirements.
- b. The State of West Virginia, through the HWMR, has adopted by reference the federal regulations (40 CFR Parts 260-279) pertaining to the administration and enforcement of hazardous waste management. Chapter 22, Article 18, the Hazardous Waste Management Act (HWMA), authorizes the DWWM to administer and enforce the provisions of the HWMA, under the supervision of the Director, DWWM. Section 8 of the HWMA requires a person to have a permit in order to construct, operate, modify or close any facility or site used to treat, store, or dispose hazardous waste.

Promoting a healthy environment.

III. PURPOSE OF PERMITTING PROCESS

The permitting process provides an opportunity for the public, DWWM and other agencies and stakeholders to evaluate the permittee's ability and commitment to comply with the HWMA and rules promulgated thereunder. Section 11.9 of the HWMR requires the DWWM to prepare a draft permit, which sets forth in one concise legal document all the applicable requirements that the Permittee must comply with during the duration of the permit.

IV. PROCEDURES FOR REACHING A FINAL DECISION

- a. Pursuant to Section 11.11 of the HWMR, the public and other agencies are given forty-five (45) days to review and comment on the application, fact sheet and the draft permit. A copy of those documents is made available for public review at the WVDEP's Public Information Office, 601 57th Street S.E., Charleston, WV 25304. The comment period begins on October 17, 2008 and ends on November 30, 2008.
- b. If during forty-five (45) day comment period, the Director of DWWM finds sufficient public interest or if she received written notice of opposition to the draft permit, and a request for a public hearing, a public hearing will be held.

Any person aggrieved or adversely affected by the action of the Director concerning the permit has the right to appeal as provided under Section 20 of the HWMA.

The contact person for this permit is Carroll Cather, WVDEP-DWWM-Hazardous Waste Permit Unit, 601 57th Street S.E., Charleston, WV 25304, (304) 926-0499, ext. 1317.

V. FACILITY DESCRIPTION

The facility is located in an area near State Route 25 approximately 2 miles west of Institute, West Virginia. The facility is bounded on the south by the Kanawha River. A tributary of Gabbert's Branch and State Route 25 form the northern boundary of the facility. Gabbert's Branch acts as the western boundary while Ryan's Branch and the Bayer CropScience Wastewater Treatment Plant comprise the eastern boundary.

Between 1942 and 1965 the area was used for the disposal and storage of chemicals, chemical byproducts and construction debris generated primarily by the UCC Institute facility. In 1976, the PTO facility was constructed to clean and store tank trucks and railcars. Fluids from cleaning operations flowed into channel drains and to an onsite wastewater pretreatment facility consisting of three RCRA-regulated surface impoundments (equalization basin, sludge pond, and panic pond). In 1985

the PTO facility was taken out of service, and the three units (surface impoundments) were closed in 1987. The three impoundments were dewatered, the remaining waste within was stabilized or solidified, and the impoundments were capped as one solid waste management unit known as SWMU 9.

VI. PROCEDURES LEADING TO THIS PERMIT

In 1985 the UCC-PTO facility submitted an application for a Post Closure Permit. The West Virginia Division of Natural Resources (WVDNR) requested modifications to the application and, in 1987, the West Virginia Division of Natural Resources (WVDNR) was prepared to issue a Post-Closure Permit to UCC-PTO for the closed impoundments known as SWMU 9. UCC-PTO asked the WVDNR to hold off on the issuance of the Post-Closure Permit until RCRA Corrective Action could be incorporated into the Permit insuring a site-wide approach. EPA granted authorization to the WVDEP for Corrective Action in 2003. In the meantime, UCC-PTO had conducted groundwater monitoring activities as part of a consent order, and submitted annual groundwater assessment monitoring reports in compliance with the consent order. In 1999, USEPA and UCC-PTO entered into a facility lead agreement to conduct site-wide corrective action at the facility. In 2007, WVDEP requested that UCC-PTO apply for a Post-Closure Permit for the closed impoundments known as SWMU 9. In June 2008, WVDEP requested corrections to information contained in the 2007 permit application. On June 5, 2008, UCC-PTO provided revised portions of the Post-Closure Permit application, and on September 4, 2008, UCC-PTO submitted a Groundwater Monitoring Plan describing a site-wide monitoring well network.

VII. ORGANIZATION

The permit is divided into Modules as outlined below:

Module I	Standard Conditions
Module II	General Facility Conditions
Module III	Post Closure Care including Groundwater Monitoring
Module IV	Corrective Action

VIII. BASIS FOR PERMIT CONDITIONS

- a. Module I of the permit sets forth the Standard Conditions that are applicable to all hazardous waste management facilities.
- b. Module II of the permit sets forth the General Conditions for the facility. The reference given to the attachments are to the attachments submitted by the Permittee in the Part B Post-Closure Permit Reissuance Application.

- c. Module III sets forth conditions applicable during the Post-Closure period, including groundwater monitoring activities related to SWMU #9 at the facility.
- d. Module IV sets forth conditions for Corrective Action in this Permit. In the near future, details of site-wide Corrective Action remedies selected by the Permittee will become part of this Permit and incorporated into this Module IV.

MODULE I STANDARD CONDITIONS

Module I of the permit sets forth the standard conditions that are applicable to all hazardous waste management and corrective action facilities. The regulations applicable to permitting, Parts 260 through 264, 268, and 270, of Title 40, Code of Federal Regulations, have been incorporated by reference into Sections 2 through 7, and 9 through 11, respectively, of the State Legislative Rules, Title 33, Series 20, the Hazardous Waste Management Rule (HWMR).

I- A EFFECT OF PERMIT

- A-1 The Permittee is allowed to manage hazardous waste in accordance with the conditions of the West Virginia Hazardous Waste Management Permit (RCRA Permit or Permit). Any management of hazardous waste not authorized by this RCRA permit or allowed by 40 CFR Part 262 is prohibited, unless otherwise expressly or specifically exempted by law.
- A-2 Compliance with the RCRA Permit during its term constitutes compliance, for purposes of enforcement, with the Hazardous Waste Management Act (Chapter 22, Article 18 of the West Virginia Code), (hereinafter, the HWMA), except for those requirements not included in the Permit which: 1) become effective by statute; or 2) are promulgated under 40 CFR, Part 268, restricting the placement of hazardous waste in, or on the land; or 3) are promulgated under 40 CFR, Part 264, regarding leak detection systems for new, replacement, and lateral expansions of surface impoundments, waste piles, and landfill units which will be implemented through the procedures of 40 CFR §270.42, Class 1 permit modifications; or 4) are promulgated under Subparts AA, BB, or CC of 40 CFR, Part 265, limiting air emissions.
- A-3 Issuance of this Permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of State or local law or regulations.
- A-4 Compliance with the terms of this Permit does not constitute a defense to any order issued or any action brought by the U. S. Environmental Protection Agency (US EPA) under Sections 3008(a), 3008(h), 3013, or 7003 of RCRA; Sections 104, 106(a), or 107, of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended (42 U.S.C. 9601 et. seq., commonly known as CERCLA); or any other law providing for protection of public health or the environment.

I- B SEVERABILITY

The provisions of this Permit are severable, and if any provision of this Permit, or if the application of any provision of this Permit is changed due to any circumstance, the application of such provision to other circumstances, the application of such provision to remaining provisions of this Permit shall not be affected.

I- C DEFINITIONS

For the purpose of this Permit, terms used herein shall have the same meaning as those set forth in the HWMA, HWMR, and 40 CFR, Parts 260 through 264, 268, and 270, which have been incorporated by reference, unless this Permit specifically states otherwise. Where terms are not otherwise defined, the meaning associated with such terms shall be as defined by a standard dictionary reference or the generally accepted scientific or industrial meaning of the term. The following definitions also apply to this Permit.

- C-1 "Director" means the Director of the Division of Water and Waste Management, West Virginia Department of Environmental Protection.
- C-2 "Days" means calendar days, except as otherwise provided herein.
- C-3 "Facility" - for the purpose of implementing corrective action under 40 CFR §264.101, the facility is all contiguous property designated in the Part B Permit Application and under the control of the owner or operator seeking a permit under Subtitle C of RCRA {(40 CFR §260.10, Definitions, (2))}. The permitted facility is SWMU #9 and does not include the area surrounding SWMU #9 to the east of the Marshalling Yard Entrance Road.
- C-4 "Hazardous Constituent" means any constituent identified in Appendix VIII of 40 CFR, Part 261, or any constituent identified in Appendix IX of 40 CFR, Part 264.
- C-5 "Release" means any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment.
- C-6 "Solid Waste Management Unit" ("SWMU") - any discernible unit at which solid wastes have been placed at any time, irrespective of whether the unit was intended for the management of solid or hazardous waste. Such units include any area at a Facility at which solid wastes have been routinely and systematically released.

- C-7 "Area of Concern" ("AOC") - an area at the facility or an off-site area, which is not at this time known to be a solid waste management unit, where releases from the facility are present or are suspected to be present.
- C-8 Secretary -- House Bill 2218, passed on April 30, 2001, elevated the Division of Environmental Protection to Department of Environmental Protection and the Director title was changed to Secretary. The Secretary superintends the Department of Environmental Protection and has delegated authority to the Director to issue permits under the HWMA and the HWMR.
- C-9 Permit Modifications -- Class 1, Class 2, and Class 3. -- Three levels of permit modifications at the request of the Permittee are described and listed in detail in Appendix I of 40 CFR §270.42.

I- D SIGNATORY REQUIREMENT

All reports required by this Permit and other information requested by the Director shall be signed and certified by an authorized representative. If an authorization is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, or because a new individual or position has responsibility for the facility's compliance with environmental laws and permits, a new authorization satisfying the requirements shall be submitted to the Director prior to or together with any reports, information, or applications to be signed by an authorized representative.

I- E DUTIES AND REQUIREMENTS

- E-1 The Permittee must comply with all conditions of this Permit, except that the Permittee need not comply with the conditions of this Permit to the extent and for the duration such noncompliance is authorized in an emergency permit. (See 40 CFR §270.61). Any permit noncompliance, except under the terms of an emergency permit, constitutes a violation of the HWMA and is grounds for enforcement action; for permit termination, revocation and re-issuance, or modification; or for denial of a permit renewal application as referenced by 40 CFR §270.30.
- E-2 As required by 40 CFR §270.30(b), the Permittee shall submit a complete application for a new permit at least one hundred-eighty (180) days before this permit expires unless: a) the Permittee no longer wishes to operate a hazardous waste management facility; b) the Permittee is no longer required to have a RCRA permit; or c) permission for a later date has been granted by the Director. The Director shall not grant permission for applications to be submitted later than the expiration date of the existing permit.
- E-3 As set forth in 40 CFR §270.30(c), It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce

the permitted activity in order to maintain compliance with the conditions of this Permit.

- E-4 In the event of noncompliance with the permit, the Permittee shall take all necessary steps to minimize releases to the environment and shall carry out such measures as are necessary to prevent significant adverse impact on human health or the environment as required by 40 CFR §270.30(d).
- E-5 As set forth in 40 CFR §270.30(e), the Permittee shall, at all times, properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality control/quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit.
- E-6 This permit may be modified, revoked, reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition as referenced by 40 CFR §270.30(f).
- E-7 The Permittee shall furnish to the Director, within a reasonable time designated by the Director, any relevant information which the Director, may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to the Director copies of records that are required by this permit as required by 40 CFR §270.30(h).
- E-8 The Permittee shall allow the Director, or an authorized representative upon the presentation of credentials and other documents as may be required by law to:
- a. Enter at reasonable times upon the Permittee's premises where the regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit as referenced by 40 CFR §270.30(i)(1);
 - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit as referenced by 40 CFR §270.30(i)(2);

- c. Inspect, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit as referenced by 40 CFR §270.30(i)(3); and
- d. Sample or monitor, at reasonable times, for the purposes of assuring permit compliance, or as otherwise authorized by the HWMA, any substances or parameters at any location as referenced by 40 CFR §270.30(i)(4).

E-9 Monitoring and Records as required by 40 CFR §270.30(j).

- a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
- b. The Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, the certification required by 40 CFR §264.73(b)(9), and records of all data used to complete the application for this permit, for a period of at least three years from the date of the sample, measurement, report, certification, or application. This period may be extended, by request of the Director, at any time. The Permittee shall maintain records from all groundwater monitoring wells and associated groundwater surface elevations, for the active life of the facility, and for disposal facilities for the post-closure care period as well.

E-10 Reporting Requirements as required by 40 CFR §270.30(l).

- a. Permittee shall give notice and receive approval from the Director of any planned physical alterations or additions to the permitted facility. The permitted facility is SWMU #9 and does not include the area surrounding SWMU #9 to the east of the Marshalling Yard Entrance Road.
- b. The Permittee shall give advance notice to the Director, of any planned changes in the permitted facility, or activity, which may result in noncompliance with permit requirements. Such notice does not constitute a waiver of the Permittee's duty to comply with permit requirements.
- c. This permit is not transferable to any person except after notice to the Director. The Director may require modification or revocation and reissuance of the permit to change the name of the Permittee and incorporate such other requirements as may be necessary under RCRA. See 40 CFR §270.40 for further information and clarification.

- d. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted to the Director, no later than fourteen (14) days following each scheduled date.
- e. The Permittee shall report to the Director any noncompliance, which may endanger human health or the environment orally within twenty-four (24) hours from the time the Permittee becomes aware of the circumstances. This report shall include the following:
 - 1. Information concerning the release of any hazardous waste which may endanger public drinking water supplies; and
 - 2. Information concerning the release or discharge of any hazardous waste, or of a fire or explosion at the facility, which could threaten the environment or human health outside the facility.
 - 3. The description of the occurrence and its cause shall include:
 - a. Name, address, and telephone number of the owner or operator;
 - b. Name, address, and telephone number of the facility;
 - c. Date, time, and type of incident;
 - d. Name and quantity of material(s) involved;
 - e. The extent of injuries, if any;
 - f. An assessment of actual or potential hazard(s) to the environment and human health outside the facility, where this is applicable, and;
 - g. Estimated quantity and disposition of recovered material that resulted from the incident.
 - 4. Written submission shall also be provided to the Director within five (5) days of the time the Permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period(s) of noncompliance (including exact dates and times); steps taken to minimize impact on the environment; whether the noncompliance has been corrected, and if not, the anticipated

time it is expected to continue; and steps taken or planned to reduce, eliminate and prevent recurrence of the noncompliance. The Permittee need not comply with the five (5) day written notice requirement if the Director waives the requirement. Upon waiver of the five (5) day requirement, the Permittee shall submit a written report within fifteen (15) days of the time the Permittee becomes aware of the circumstances.

- E-11 The Permittee shall report all other instances of noncompliance not otherwise required to be reported above within fifteen (15) days of when the Permittee becomes aware of the noncompliance. The reports shall contain the information listed in Condition I-E-10.
- E-12 Whenever the Permittee becomes aware that it failed to submit any relevant facts in the permit application, or submitted incorrect information in a permit application or in any report to the Director, the Permittee shall promptly submit such facts or information.
- E-13 Submittal of Reports or Other Information

All plans, reports, notifications or other documents which are required by this permit to be submitted to the Director, shall be sent Certified Mail, Return Receipt Requested, overnight mail, or hand-carried to:

Original (Hard Copy)

Director
West Virginia Department of Environmental Protection
Division of Water and Waste Management
601 57th Street SE
Charleston, WV 25304

Two (2) Copies (Electronic)

Hazardous Waste Permitting Unit
West Virginia Department of Environmental Protection
Division of Water and Waste Management
601 – 57th Street
Charleston WV 26304

One (1) Copy (Electronic)

Environmental Enforcement Inspector Supervisor
West Virginia Department of Environmental Protection
Division of Water and Waste Management
601 – 57th Street
Charleston WV 26304

Documents to be submitted to the Permittee shall be sent to:

Jerome E. Cibrik, P.G., LRS or Authorized Representative
Union Carbide Corporation
A Subsidiary of the Dow Chemical Company
P.O. Box 8361
3200/3300 Kanawha Turnpike
South Charleston, WV 25303

E-14 Qualified Implementation

- a. The Permittee shall ensure that all work performed under this Permit is done by qualified persons.
- b. Within fifteen (15) calendar days after the effective date of this Permit, the Permittee shall submit to the Director, in writing, the names, titles, and qualifications of the Principal Contractors, engineers, geologists, contractors and subcontractors (hereinafter "contractors") the Permittee has engaged to carry out the terms of this Permit as related to the permitted facility. Each contractor and subcontractor shall be qualified to perform those portions of the requirements of this Permit for which the contractor or subcontractor has been retained.
- c. The Director shall have the right to disapprove, at any time, the selection, or use, of any contractor selected by the Permittee carrying out this Permit. The Director's disapproval, or use, of this selection shall be subject to review under Section I-K of this Permit ("DISPUTE RESOLUTION"). If Dispute Resolution is not adopted, within a reasonable period of time, not to exceed fifteen (15) days after receipt from the Director of a written notice disapproving the selection of any contractor, the Permittee shall notify the Director, in writing, of the names, titles and qualifications of the personnel who will replace the personnel whose selection was disapproved by the Director.
- d. The Permittee shall notify the Director fifteen (15) calendar days prior to replacing voluntarily a Principal Contractor to be used in carrying out the terms of this Permit, and shall submit to the Director the names, titles, and qualifications of replacement personnel.

I-F TERMINATION OF PERMIT

F-1 The following are causes for terminating a permit during its term, or for denying a permit renewal application as referenced by 40 CFR §270.43.

- a. Noncompliance by the permittee with any condition of the permit;
- b. The permittee's failure in the application or during the permit issuance process to disclose fully all relevant facts, or the permittee's misrepresentation or any relevant facts at any time; or
- c. A determination that the permitted activity endangers human health or the environment and can only be regulated to acceptable levels by permit modification or termination.

F-2 The Director shall follow the applicable procedures in Section 11 of the HWMR in terminating any permit under this section.

I-G DURATION OF PERMIT

G-1 This permit and all conditions herein shall be effective for a fixed term not to exceed ten (10) years as referenced by 40 CFR §270.50(a).

G-2 Except as provided by 40 CFR §270.51, the term of a permit shall not be extended by modification beyond duration as referenced in 40 CFR §270.50(b).

G-3 The Director may issue a permit for a duration that is less than the full allowable term as referenced in 40 CFR §270.50(c).

I-H CONFIDENTIAL INFORMATION

In accordance with Section 11.18.b and c. of the HWMR, any information submitted to the Director, pursuant to this permit, may be claimed as confidential by the submitter. Any such claim must be asserted at the time of submission in the manner prescribed in Section 11.18.b. and c. of the HWMR. If no claim is made at the time of submission, the Director shall make the information available to the public. If a claim is asserted, the information shall be treated in accordance with the procedures in Section 11.18 of the HWMR.

I-I DISCLOSURE IN DEED

Pursuant to Section 21 of the HWMA and Section 12 of the HWMR, the Permittee shall make a notation on the deed or lease to the facility property, or on some other instrument that is normally examined during title search, that will, in perpetuity notify any potential purchaser that the land has been used to manage hazardous waste. Such disclosure shall describe the location upon said property, identifying the type and

quantity of hazardous waste and the method of storage, treatment, or disposal with respect to such waste.

I- J APPROVAL AND DISAPPROVAL OF SUBMISSIONS

The Director will review the plans, reports, schedules and other documents (hereinafter collectively referred to as "submission") submitted which require the Director's approval, with the exception of documents submitted in accordance with Module IV. The Director will notify the Permittee in writing of his approval, conditional approval or disapproval of each submission.

Each submission required by this permit is, upon approval by the Director, incorporated into this permit. Noncompliance with any Director-approved submissions shall be deemed noncompliance with this permit. A conditionally approved submission, including any terms of such conditional approval set forth in the Director's decision, shall constitute the Director-approved submission and shall be incorporated into this permit.

In the event of the Director's conditional approval of submission, the Director shall specify in writing any deficiencies in the submission and the terms upon which approval of the submission is conditioned. If the Permittee disputes any term upon which approval of the submission was conditioned, the Permittee may initiate Dispute Resolution pursuant to permit condition I-K. In the event of the Director's disapproval of a submission, the Director shall specify the deficiencies in writing. Such disapproval shall be subject to the Dispute Resolution provision set forth in permit condition I-K. The Permittee shall modify the submission to correct/address the specified deficiencies within a reasonable time period established by the Director taking into account the tasks to be performed, and submit the revised submission to the Director for approval. If the revised submission is disapproved, the Director will notify the Permittee of the deficiencies in writing and specify a schedule for the Permittee to correct the deficiencies and resubmit the submission to the Director. The Permittee shall correct the deficiencies as directed by the Director and forward the revised submission to Director within the time period specified by the Director. In the event the Permittee disagrees with the Director's disapproval of the revised submission the Permittee shall notify the Director in writing and the disagreement shall be resolved in accordance with the Dispute Resolution provision in permit condition I-K of this permit.

No informal advice, guidance, suggestions, or comments by the Director regarding reports, plans, specifications, schedules, and any other writing submitted by the Permittee shall be construed as relieving the Permittee of its obligation to obtain written approval, if and when required by this Permit.

I – K DISPUTE RESOLUTION

Except as otherwise provided in this permit, in the event the Permittee disagrees, in whole or in part, with the Director's disapproval of any submission required by this permit, the Permittee shall notify WVDEP in writing of the objections, and the basis therefore, within fourteen (14) days of receipt of the Director's disapproval.

Such notice shall set forth the specific matters in dispute, the basis for the Permittee's belief that its position is consistent with the permit requirements, and any supporting documentation.

The Director and the Permittee shall have an additional fourteen (14) days from the Director's receipt of the notification to meet or confer to resolve any dispute. In the event agreement is reached, the Permittee shall submit the revised submission and implement the same in accordance with such agreement.

In the event the Director and the Permittee are not able to reach agreement within this fourteen (14)-day period, the Permittee shall have the opportunity to submit written comments regarding the Director's decision to, and receive a written decision from the Director or his representative. The Director will notify the Permittee in writing of the decision and the Permittee shall comply with the terms and conditions of the Director's decision. The Permittee does not waive the right to assert any and all available defenses in a proceeding to enforce this permit.

MODULE II GENERAL FACILITY CONDITIONS

II-A DESCRIPTION OF CLOSED SURFACE IMPOUNDMENTS

Three RCRA-regulated surface impoundments (the sludge pond, the panic pond, and the treatment pond) were closed in 1987. The units were dewatered, stabilized, solidified and capped in accordance with an approved closure plan. These three units have been collectively designated as Solid Waste Management Unit (SWMU) 9 and their closure was described in a RCRA post-closure permit application submitted to the West Virginia Division of Natural Resources in 1987. The RCRA cap for these former impoundments consisted of the following: a 24-inch compacted clay liner, a 60-mil synthetic liner, a 12-inch thick sand flow zone, a synthetic geotextile, and a 12-inch-thick vegetative zone. On June 29, 2007, the Permittee submitted a new, revised permit application that incorporates portions of original applications, as applicable, and references 20 years of groundwater monitoring. A new, revised permit application was necessary because of changes since the original applications. On June 5, 2008, the Permittee submitted revisions to the 2007 permit application. On September 4, 2008, the Permittee submitted a revised Groundwater Monitoring Plan (GMP) dated August 2008. According to this GMP, a sitewide monitoring well network is in place to monitor potential releases to groundwater from SWMUs and to assist in evaluating remedial alternatives for groundwater. The Permittee states that data collected from this well network will be used to monitor remediation progress and evaluate plume activity. The GWP was approved on September 23, 2008 with the following modification: In Section 3.5 - Sample Identification – Sample labels should also include the sample time and the name of the sampler.

II-B SECURITY

- B-1 The Permittee shall comply with the security provisions of 40 CFR §264.14, and described in Section F.1.a of the 2007 Post Closure Permit Application.
- B-2 The eastern portion of the facility containing SWMU 9 is surrounded by a six-foot high chain link fence topped by barbed wire. The facility is routinely patrolled by Bayer Cropscience Security (Bayer). Bayer operates an active facility adjacent to and east of SWMU 9. Additionally, Bayer has security cameras that cover the facility and continuously monitor site activity. Gates are located on each side of the facility and are locked at all times except to allow entry and egress of authorized personnel. To prohibit trespassing, perimeter fencing is posted with warning signs that say "Keep Out" and "Authorized Personnel Only."

II-C GENERAL INSPECTION REQUIREMENTS

- C-1 The Permittee must inspect the SWMU 9 cap for malfunctions and deterioration

that may be cause - or may lead to - (1) a release of hazardous waste constituents to the environment or (2) a threat to human health as referenced by 40 CFR §264.15(a).

- C-2 The Permittee must conduct these inspections often enough to identify problems in time to correct them before they harm human health or the environment as referenced by 40 CFR §264.15 (a).
- C-3 The Permittee must remedy any deterioration or malfunction of equipment or structures discovered by an inspection as required by 40 CFR §264.15(c).
 - a. Where a hazard is imminent or has already occurred, the Permittee must take remedial action immediately.
 - b. The Permittee shall, within fifteen (15) calendar days of an inspection, remedy any deterioration or malfunction of equipment or structure to ensure that the problem does not lead to an environmental or health hazard.
 - c. If the remedial action is expected to take more than fifteen (15) days, the Permittee shall, in addition to the immediate response specified in II-C-3a, submit a schedule for remedial action to the Director for approval.
- C-4 The Permittee shall record inspections in an inspection log or summary. The Permittee must keep these records for at least three years from the date of inspection. At a minimum, these records must include the date and time of the inspection, the name of the inspector, a notation of the observation made, and the date and nature of any repairs or other remedial action as required by 40 CFR §264.15(d).

II-D PERSONNEL TRAINING

- D-1 The Permittee shall conduct personnel training as required by 40 CFR §264.16 and shall maintain training records as required by 40 CFR §264.16(d) and (e).
- D-2 The Permittee will ensure that individuals responsible for the inspection and maintenance of SWMU 9, and associated groundwater monitoring network, have been appropriately trained to conduct those activities and are in compliance with Occupational Safety and Health Administration (OSHA) requirements for workers at hazardous waste site [29 CFR §1910.120(e) and §1910.120(f)].

II-E DOCUMENTS TO BE MAINTAINED AT THE FACILITY

The Permittee shall maintain, at UCC's designated facility, until such time as the permit expires the following items required by 40 CFR §264.73, including the following documents and all amendments, revisions, and modifications to these documents.

- E-1 Waste analysis results, as referenced by Post Closure Permit Application;
- E-2 The following information must be recorded and maintained in the Operating Record as it becomes available, as required by 40 CFR §264.73:
 - a. Records and results of groundwater monitoring analyses performed as specified in 40 CFR §264, Subpart F;
 - b. Results of inspections as required by 40 CFR §264.15(d)
 - c. Monitoring, testing, or analytical data, and corrective action where required by 40 CFR §264, subpart F and §264.19, §264.191, §264.193, §264.195, §264.222, §264.223, §264.226, §264.252-§264.254, §264.276, §264.278, §264.280, §264.302- §264.304, §264.309, §264.347, §264.602, §264.1034(c)- §264.1034(f), §264.1035, §264.1063(d)- §264.1063(i), §264.1064, §264.1088, §264.1089, and §264.1091.
 - d. For disposal facilities, all post-closure cost estimates as referenced by 40 CFR §264.144.
- E-3 Corrective action reports and records, if any, must be maintained for at least three (3) years after all corrective action activities have been completed.

II-F COST ESTIMATES FOR POST-CLOSURE CARE

- F-1 The Permittee shall comply with the requirement of 40 CFR §264.144.
- F-2 The Permittee shall adjust the post-closure cost estimate for inflation within sixty (60) days prior to the anniversary date of the establishment of the financial instrument(s) used to comply with 40 CFR §264.145. If using the financial test or corporate guarantee, the post-closure cost must be updated for inflation within thirty (30) days after the close of the firm's fiscal year and before the submission of updated information to the Regional Administrator as specified by 40 CFR §264.145(f)(5).

II-G CONSIDERATIONS UNDER STATE LAW

G-1 Groundwater Protection Act

The Secretary, WVDEP, under the provisions of the Groundwater Protection Act (Article 12, Chapter 22 of the West Virginia Code), has certified the groundwater regulatory program of the Division of Water and Waste Management (DWWM), Hazardous Waste Management, and thereby authorized DWWM to be a groundwater regulatory agency for the purposes of Article 12.

a. Annual Fee

The Permittee shall pay the annual groundwater protection fund fee in accordance with the regulations codified as Title 47, Series 55, that were promulgated under the Groundwater Protection Act. Pursuant to Section 9(a) of this Act, failure to remit groundwater protection fund fees may result in withdrawal or withholding of groundwater certification and, subject the Permittee to the penalties outlined in West Virginia Code §22-12-10.

b. Groundwater Protection Plan

The Groundwater Protection Regulations, Title 47, Series 58, promulgated under the Groundwater Protection Act, establish a series of practices that must be followed by persons subject to the Groundwater Protection Act. Pursuant to Section 4.12.3 of 47 CSR 58, the Groundwater Protection Plan (GPP) must be available on site at all times.

MODULE III POST-CLOSURE CARE

III-A GENERAL POST-CLOSURE CARE REQUIREMENTS

- A-1 As required by 40 CFR §264.117(a)(1), post-closure care for each hazardous waste management unit subject to the requirements of 40 CFR §264.117 through §264.120 must begin after completion of closure of the unit and continue for thirty (30) years after that date and must consist of at least the following:
- a. Monitoring and reporting of waste containment systems in accordance with the requirements of 40 CFR §264 Subparts F, K, L, M, N, and X; and,
 - b. Maintenance and monitoring of waste containment systems in accordance with requirements of 40 CFR §264 Subparts F, K, L, M, N, and X.
- A-2 As required by 40 CFR §264.117(a)(2), any time during the post-closure period for a particular unit, the Director may, in accordance with the permit modification procedures in 40 CFR §270:
- a. Shorten the post-closure care period applicable to the hazardous waste management unit, or facility, if all disposal units have been closed, if the Director finds that the reduced period is sufficient to protect human health and the environment; or,
 - b. Extend the post-closure care period applicable to the hazardous waste management unit or facility if the Director finds that the extended period is necessary to protect human health and the environment.
- A-3 As referenced by 40 CFR §264.117(c), post-closure use of property on or in which hazardous waste remain after final closure must never be allowed to disturb the integrity of the final cover, liner(s), or any other components of the containment system, or the function of the facility's monitoring systems, unless the Director finds that the disturbance:
- a. Is necessary to the proposed use of the property, and will not increase the potential hazard to human health or the environment; or,
 - b. Is necessary to reduce a threat to human health or the environment.

III-B GENERAL POST-CLOSURE PLAN REQUIREMENTS

- B-1 As required by 40 CFR §264.118(a), the Permittee must have a written post-closure plan.

- B-2 As required by 40 CFR §264.118(d), the Permittee must submit a written notification or request for a permit modification to the Director to authorize a change in the approved post-closure plan. The written notification or request must include a copy of the amended post-closure plan for review or approval by the Director.
- a. The Permittee may submit a written notification or request to the Director for a permit modification to amend to the post-closure plan at any time during the post-closure care period.
 - b. The Permittee must submit a written notification or request to the Director for a permit modification to authorize a change in the approved post-closure plan whenever:
 1. Changes in the operating plans or facility design affect the approved post-closure plan; or,
 2. There is a change in the expected year of final closure, if applicable; or,
 3. Events that occur during the active life of the facility, including partial and final closures, affect the approved post-closure plan.

III-C UCC-PTO POST-CLOSURE PLAN REQUIREMENTS.

C-1 General

SWMU#9 requires a post-closure plan because hazardous waste remains in place after closure. On February 25, 1986, the Permittee revised its Part A application. Part of the revision included Form 3, Page 1, Item III, line 3, which stated the following: "S04, 140,000 gallons (formerly Line 3) and T02, 288,000 gallons per day, (formerly Line 5) have been combined to D83, 17,000 gallons (Line 1). The surface impoundments will close with some sludges left in place, and will be permitted as disposal impoundments under a RCRA post-closure permit. Closure of the units (explained in detail in Section I of this permit application) involves leaving approximately 17,000 gallons of sludge in place." The post-closure plan included an inspection plan and maintenance plan. Post-closure activities have been implemented since 1987. Updating the post-closure plan as necessary is the responsibility of the Permittee. An updated copy of this post-closure plan is located at the facility. When the post-closure plan is revised, copies will be sent to state and federal agencies.

C-2 Inspection Plan

Inspections will be performed quarterly for SWMU#9 and include the following:

- Security—A fence was previously installed to restrict area access to the three RCRA ponds and to the groundwater monitoring wells during post-closure. Access to the closed impoundments will require clearance by authorized UCC personnel as gates to the area

are kept locked at all times except during work and warning signs are posted. Condition of the fence, signs, and gates will be noted during the inspections.

- Condition of cap—The cap will be inspected for erosion damage, settlement and subsidence, and vegetative cover. Any damage will be immediately remedied.
- Run-on and runoff control—Runoff will only be affected by erosion to the cap or by reduction of slope due to subsidence and settlement. No run-on is expected due to slope of the cap.

The inspection checklist used at the facility is provided in Appendix I-2 of the 2007 Post-Closure Permit Application. Copies of the checklists, manifests and inspection notes are maintained at the facility.

C-3 Monitoring Plan

Groundwater monitoring has been conducted for the past 20 years and is based on the GWQAMP approved by WVDEP in August 1985, and the groundwater compliance monitoring program described in Section E-6 of the previously submitted permit application (UCC 1987). The samples were analyzed for selected hazardous constituents that may have resulted from waste handled at the facility. Samples have previously been analyzed for pH, total organic carbon (TOC), and specific conductance, as well as other interim status parameters (nitrates, sulfates, chlorides, and total organic halides [TOX]).

The original wells for the area around SWMU #9 were installed in 1981. Those wells were OW-08 as background and GW-1, GW-2, and GW-3. The Permittee has installed several series of monitoring wells after 1981.

The Permittee submitted a 2007 Groundwater Monitoring Assessment Report in February, 2008. In a 2005 Groundwater Monitoring Assessment Report, the Permittee sampled monitoring wells OW-1, OW-2, OW-3, OW-4, OW-5, OW-6, OW-8, and OW-9, OW-10, OW-11, OW-12, and OW-13. The Permittee also mentioned wells GW-2, GW3, 85-PW, 85-4A, 85-4B, 85-5A and 85-5B in the 2005 Report.

On September 4, 2008, the Permittee submitted a revised Groundwater Monitoring Plan (GMP) dated August, 2008. The revised GMP covers sitewide corrective action. The wells required for this post-closure permit may be a part of the overall monitoring well network described in the GMP.

The wells to be sampled as compliance with this permit are background well 1B, and the following three wells represented to be down-gradient wells: MW 85-4B, MW 85-5A, and MW – 107. The purpose of the groundwater monitoring is to ascertain if the waste remaining is impacting groundwater at the site.

- 1) All wells that would normally require collision guards or other protection shall have collision guards, and shall be made visible by painting and then numbered.

- 2) All wells shall have concrete surface aprons adequate to insure that the well samples are not impacted by surface water.
- 3) All wells shall be secured by locking and access shall be maintained for monitoring purposes.

C-3 a. Sample Collection Frequency

Groundwater samples will be collected from the following wells included in the monitoring wells on a quarterly basis for 1 year: 1B, MW 85-4B, MW 85-5A, and MW-107. The quarterly sample collection frequency will provide a temporal data baseline at each monitoring well location. After completing 1 year of groundwater sampling, the sample collection frequency will be reduced to a 9-month interval for the monitoring locations listed above. The 9-month sample frequency interval provides a means to evaluate seasonal changes. At a minimum, samples will be collected annually.

C-3 b. Analytical Parameters

Monitoring locations east of and including monitoring wells MW-105 and MW-3B will be analyzed for target compound list (TCL) volatile organic compounds (VOCs; USEPA Method SW846-8260B), TCL semivolatile organic compounds (SVOCs; USEPA Method SW846-8270C), and selected RCRA metals (dissolved arsenic, dissolved cadmium, and dissolved chromium). SWMU #9 is located in this section of the facility.

The conditions of Section C-3 above will no longer apply when a Corrective Action Module outlining site-wide groundwater monitoring and reporting is incorporated into this permit,

C-4 Maintenance Plan

UCC documents any routine maintenance as well as remediations performed as a result of quarterly inspections. Maintenance is performed in a planned manner upon discovery of damage in order to maintain the integrity of the system. All well pumps must be maintained to adequately operate during sampling activities. The post-closure activities for SWMU #9 include maintenance of the groundwater monitoring well system.

III-D FINANCIAL ASSURANCE

D-1 DEFINITIONS

- a. "Accidental Occurrence" means an accident, including continuous or repeated exposure to conditions, which results in bodily injury or property

damage neither expected nor intended from the standpoint of the insured.

- b. "Current Post-Closure Cost Estimate" means that most recent of the estimates prepared in accordance with 40 CFR §264.144 (a), (b), and (c).
- c. "Legal Defense Cost" means any expense than an insurer incurs in defending against claims of third parties brought under the terms and conditions of an insurance policy.
- d. "Non-sudden Accidental Occurrence" means an occurrence that takes place over time and involves continuous or repeated exposures.
- e. "Post-Closure Plan" means the plan for post-closure prepared in accordance with requirements of 40 CFR §264.117 through §264.120.
- f. "Sudden Accidental Occurrence" means an occurrence that is not continuous or repeated in nature.

D-2 COST ESTIMATES FOR POST-CLOSURE CARE

- a. As required by 40 CFR §264.144(b), the Permittee shall adjust the post-closure cost estimate for inflation within sixty days prior to the anniversary date of the establishment of the financial instrument used to comply with 40 CFR §264.145.
- b. As required by 40 CFR §264.144(c), the Permittee must revise the post-closure cost estimate within thirty (30) days after the Director has approved the request to modify the post-closure plan, if the change in the post-closure plan increases the cost of post-closure care. The revised post-closure cost estimate must be adjusted for inflation as specified in 40 CFR §264.144(b).
- c. As required by 40 CFR §264.144(D), the Permittee must keep at the facility or at a designated facility, the latest post-closure cost estimate prepared in accordance with 40 CFR §164.144 (a) and (c) and, when this estimate has been adjusted in accordance with 40 CFR §144(b), the latest adjusted post-closure cost estimate.

D-3 INCAPACITY OF OWNER/OPERATORS, GUARANTORS, OR FINANCIAL INSTITUTIONS

The Permittee must notify the Director by certified mail, of the commencement of a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code, naming the Permittee as debtor, within ten (10) days after commencement of the proceeding, as required by 40 CFR §264.148.

MODULE IV CORRECTIVE ACTION

In 1999, Union Carbide Corporation entered an agreement with EPA Region III to become a partner with EPA in the Facility Lead Program to perform RCRA Corrective Action activities at the PTO facility. The RCRA Corrective Action Program (CAP) requires investigation and cleanup of releases of hazardous constituents and hazardous waste that pose an unacceptable threat at RCRA hazardous waste treatment, storage, and disposal (TSD) facilities. The objectives of the RCRA CAP at a hazardous waste TSD are to evaluate the nature and extent of the releases of hazardous waste constituents; to evaluate facility characteristics; and to identify, develop, and implement an appropriate corrective measure or measures to protect human health and environment.

This Post Closure Permit does not affect the Facility Lead Program with respect to ongoing Corrective Action at this facility. The Permit serves as a formal mechanism to legally require the Permittee to perform all permit-related activities regarding SWMU 9. It is expected that details of the site-wide Corrective Action remedies selected by the Permittee will become part of this Permit and incorporated into this Corrective Action Module.